

Dimensions Math Textbook 8B			
Page	Question or Section	Error	Date Added
9	Chapter 8, 3rd P	In the following activity, we shall see how we can determine the ...	8/22/2014
9	Class Activity 4, 2(b)	...in pass per square meter if the function is linear .	
19	Chapter 5, Class activity, 1(a)(i)	Numbers in second row are incorrect. Leave them out or replace with 8, 4.5, 2, 0.5, 2, 4.5	2/5/2015
19	Chapter 5, Class activity, 1(a)(i)	Numbers in second row are incorrect. Leave them out or replace with 8, 4.5, 2, 0, 2, 4.5, 8	2/5/2015
26	Chapter 5, Try It, 5	When David hits a soccer ball with his head, ...	
51	Chapter 9, Rev. Ex. 9, 6	After the goods were delivered at the second destination, ...	
97	Chapter 11, Rev. Ex. 11, 2(d)	Omit. The problem cannot be solved using knowledge students have currently been taught.	
97	Chapter 11, Rev. Ex. 11, 3(e)	Find the coordinates of the point where line AC cuts the y -axis.	10/24/2018
130	Chapter 12, Ex. 13	In figure of blue sphere, change centre to center . In third paragraph under B, insert space in last sentence, radius of .	
132	Chapter 12, Ex. 14	Label the second part of the solution as (b) .	
138	Chapter 12, Ex. 14	In figure of blue sphere, change centre to center .	
141	Rev. Ex. 12, 13	ABCD is a trapezoid , ...	
152	Chapter 13, Ex. 13.1, 5(c)	Find the percentage of students who obtained grade A or grade B.	
158	Chapter 13, 2nd P	The diagram on the right shows a stacked bar graph which displays the number of ...	
160	Chapter 13, Ex. 13.2, 1(c)	Which snack foods were preferred ...	
160	Chapter 13, Ex. 13.2, 1(d)	Name the top three preferred snack foods among ...	
175	Chapter 13, Ex., 13.3, 2	... in one town from 200 6 to 201 4 .	
181	Chapter 13 Rev., Ex. 13, 5	... and US Dollars (USD) ...	
183	Chapter 14	In box lower right: If the distance, s meters , traveled by a car ...	
188	Chapter 14, Class Activity, 1	The same figures are shown twice in this activity. Only one is needed.	
195	Chapter 14, Ex. 14.3, 5	Its vertical distance, h meters , from the ground ...	
200	Chapter 14, Speech bubble	Express other quantities in terms of this letter .	
203	Chapter 14, Ex. 14.5, 10	...At 1:00 P.M., Bob...	
203	Chapter 14, Ex. 14.5, 13	The distance s meters traveled by	
204	Chapter 14, Ex. 14.5, 15	A tank holds 50 liters of water.	
208	Ex. 8.1, 3(a)	-0.6 L/h; 0.6 L of water leaves the container every hour.	
208	Ex. 8.1, 3(c)	After 24 hours, no water is left.	
208	Ex. 8.1, 5(a)(ii)	Yes; 15	
208	Ex. 8.1, 10(b)	-9 °C/hr . The temperature of the tea drops by 9 °C every hour.	
208	Ex. 8.1, 11(b)	Same y -intercept; y -intercept = -2 .	
208	Ex. 8.1, 13(a)	y 70 100 130 160	
208	Ex. 8.1, 13(b)	y = 30x + 40	

208	Ex. 8.1, 13(d)	\$ 115	
209	Ex. 8.2, 8(c)	11.25 m	
209	Rev. Ex. 8, 1(b)	Slope = 2; y -intercept = -1	
209	Rev. Ex. 8, 6(c)	1.6, 4.4	
209	Rev. Ex. 8, 7(c)	(-2.5, 2.5) lies on the graph; (0.5, 9.5) lies above the graph.	
209	Try It, 3(b)	08:45	
209	Try It, 4(c)(ii)	10:40 A.M.	
209	Try It, 4(c)(iii)	9:43 A.M.; 14.3 km away from P	
209	Try It, 5(a)	160 m	
209	Try It, 5(b)	(i) 8 m/s; (ii) 16 m/s; (iii) $11\frac{3}{7}$ m/s	
210	Ex. 9.1, 3	Delete the line: (i) 32; (ii) 50; (iii) 26.6	
210	Ex. 9.1, 4(b)	(i) 32; (ii) 50; (iii) 26.6	
210	Ex. 9.1, 7(c)	1 euro = US\$1.26	
210	Ex. 9.2, 2(b)	$13\frac{1}{3}$ km/h	
210	Ex. 9.2, 3(a)	(i) $83\frac{1}{3}$ m/min (ii) $55\frac{5}{9}$ m/min	
210	Ex. 9.2, 3(b)	$66\frac{2}{3}$ m/min	
210	Ex. 9.2, 3(c)	Mrs. Brown traveled for 12 minutes at a uniform speed of $83\frac{1}{3}$ m/min to a place 1,000 m from her starting point P. She then returned to the starting point at a uniform speed of $55\frac{5}{9}$ m/min in 18 minutes.	
210	Ex. 9.2, 4(c)(ii)	Alicia met John at a place 56 km from P, 1 hour 24 minutes after she had started her journey.	
210	Rev. Ex. 9, 2(c)	11 min	
210	Rev. Ex. 9, 3(c)	2 P.M., Saturday	
210	Rev. Ex. 9, 4(c)	10 km away	
211	EX. 10.2, 3	$\angle ABC$ is a right angle. $\angle ADC$ is not a right angle.	
211	EX. 10.2, 10(b)	$OC = 300$ m, $OD = 220$ m	
211	EX. 10.2, 10(c)	372 m	
211	Ex. 10.3, 7(a)	17 m	
211	Rev. Ex. 10, 9(a)	21.9 miles	
211	Rev. Ex. 10, 9(b)	25.8 miles	
212	Ex. 11.1, 5(d)	17 units ²	
212	Ex. 11.2, 10(a)	slope of $PQ = \frac{1}{2}$, slope of $QR = -2$, slope of $RS = \frac{1}{2}$, slope of $SP = -2$	
212	Ex. 11.3, 4(b)	$y = -3x + 15$	
212	Ex. 11.3, 4(e)	$y = \frac{1}{2}x - 3$	
212	Ex. 11.3, 4(f)	$y = -\frac{1}{5}x - \frac{13}{5}$	
212	Ex. 11.3, 7(b)	$y = \frac{3}{4}x - 3$	
213	Rev. Ex. 11, 3(e)	$(0, \frac{11}{5})$	
213	Rev. Ex. 11, 9(b)	$AB = \sqrt{160}$ units, $AD = \sqrt{40}$ units	

213	Rev. Ex. 11, 10(a)	$P(1,0)$																									
213	Try It, 4(b)	576 cm^3																									
214	Ex. 12.2, 15(d)	900 cm^3																									
214	Ex. 12.4, 1(b)	Surface area = 28.3 ft^2 , Volume = 14.1 ft^3																									
214	Ex. 12.4, 1(c)	Surface area = 1020 in.^2 , Volume = 3050 in.^3																									
214	Ex. 12.4, 3(b)	442 in.^3	10/24/2018																								
214	Rev. Ex. 12, 1(c)	44.2 in.^2																									
214	Rev. Ex. 12, 11(c)	427																									
214	Rev. Ex. 12, 13(d)	7590 lb																									
216	Ex. 13.1, 4(a)	The percentages under Boys should be: 24% , 16% , 60% , 100% The percentages under Girls should be: 28% , 40% , 32% , 100%																									
216	Ex. 13.1, 7(c)	<table><tr><td>Students</td><td>7th Grade</td><td>8th Grade</td><td>Total</td></tr><tr><td>Country</td><td>20%</td><td>10%</td><td>15%</td></tr><tr><td>Hip Hop</td><td>25%</td><td>35%</td><td>30%</td></tr><tr><td>Jazz</td><td>10%</td><td>25%</td><td>17.5%</td></tr><tr><td>Rock</td><td>45%</td><td>30%</td><td>37.5%</td></tr><tr><td>Total</td><td>100%</td><td>100%</td><td>100%</td></tr></table>	Students	7 th Grade	8 th Grade	Total	Country	20%	10%	15%	Hip Hop	25%	35%	30%	Jazz	10%	25%	17.5%	Rock	45%	30%	37.5%	Total	100%	100%	100%	
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216	Ex. 13.1, 8(b)	Add % after each of the values in the table.																									
217	Ex. 13.1, 9(b)	Value under Men for Watching TV should be 0.55 .																									
217	Ex. 13.1, 11(a)	<table><tr><td>Number of hours</td><td>Tally</td><td>Frequency</td></tr><tr><td>$0 < x \leq 3$</td><td>### ### ///</td><td>13</td></tr><tr><td>$3 < x \leq 6$</td><td>### //</td><td>7</td></tr><tr><td>$6 < x \leq 9$</td><td>////</td><td>4</td></tr><tr><td>$9 < x \leq 12$</td><td>///</td><td>3</td></tr><tr><td colspan="2">Total</td><td>27</td></tr></table>	Number of hours	Tally	Frequency	$0 < x \leq 3$	### ### ///	13	$3 < x \leq 6$	### //	7	$6 < x \leq 9$	////	4	$9 < x \leq 12$	///	3	Total		27							
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Total		27																									
217	Ex. 13.1, 12(a)	<table><tr><td>Lifetime of batteries (in hours)</td><td>Tally</td><td>Frequency</td></tr><tr><td>$0 < x \leq 2$</td><td></td><td>0</td></tr><tr><td>$2 < x \leq 4$</td><td>### /</td><td>6</td></tr><tr><td>$4 < x \leq 6$</td><td>### //</td><td>7</td></tr><tr><td>$6 < x \leq 8$</td><td>### ### ///</td><td>13</td></tr><tr><td>$8 < x \leq 10$</td><td>////</td><td>4</td></tr><tr><td colspan="2">Total</td><td>30</td></tr></table>	Lifetime of batteries (in hours)	Tally	Frequency	$0 < x \leq 2$		0	$2 < x \leq 4$	### /	6	$4 < x \leq 6$	### //	7	$6 < x \leq 8$	### ### ///	13	$8 < x \leq 10$	////	4	Total		30				
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217	Ex. 13.2, 9(d)	$45 < t \leq 50$																									
217	Ex. 13.3, 2(b)	7.8 million																									
218	Ex. 13.3, 9(b)	The data points are randomly scattered in a way that does not approximate a line.																									
218	Ex. 13.3, 9(c)	No, there is no correlation.																									
218	Ex. 13.3, 12(c)(i)	0.083																									
218	Ex. 13.3, (c)(ii)	$y = \frac{1}{12}x + 2$																									
218	Try It, 5(b)	$\left(\frac{2}{5}\right)^2$																									
219	Try It, 12	The value of y when x is 1 should be -2 .																									
219	Try It, 16	$x = 7.45$; 15.4 cm																									
219	Ex. 14.3, 2(d)	$x = -1.89$, $x = 2.39$																									
220	Ex. 14.5, 10	2:12 P.M.																									
220	Rev. Ex. 14, 10(a)(iii)	420																									
220	Rev. Ex. 14, 12(C)	10.2 gallons																									

Dimensions Math Textbook 8B includes activities using The Geometer's Sketchpad, which is no longer available. We recommend using GoeGebra instead.

Dimensions Math Workbook 8B		
Page	Question or Section	Error
6	Chapter 8, 14	The points $A(-3, -1)$, $B(3, 11)$, $C(0, m)$...
8	Chapter 8, 23	The altitude y meters of a ...
9	Chapter 8, 25	The profit (in thousands of dollars s) of a company ... where x (in thousands of dollars s) ...
10	Chapter 8, 27	The equations s of two linear functions...
11	Chapter 9, 1	The following table shows the quarterly revenues and expenditures s of a company...
11	Chapter 9, 2(a)(ii)	Which bookstore 's ruler is the most expensive?
21	Chapter 9, 22	Delete period at end of line.
26	Chapter 9, 29	Her average speed during the p minutes is $1\frac{2}{3}$ m/s.
35	Chapter 10, 25(b)	Apply the Pythagorean Theorem...
36	Chapter 1, 28	In the figure, the three circles with centers at ...
42	Chapter 11, 28	The figure shows an L-shaped region...
56	Chapter 13, 4	The table on the left and the table on the right show the responses from the...
64	Chapter 13, 22(c)	Describe the correlation between the two variables.
68	Chapter 13, 29	... the total weight of fruits produced from each tree was measured.
78	Chapter 14, 26(b)	Leave your answer with square root signs .
80	Chapter 8, 23(c)	37.5 m, 3.5 s
82	Chapter 10, 14(b)(ii)	5.10 cm
82	Chapter 10, 14(c)	219 cm^2
86	Chapter 13, 16(b)	Investments row, Total column: 23.25
87	Chapter 13, 23(b)	(a) should be (b)
87	Chapter 13, 33(d)	(a) should be (d)

Dimensions Math Workbook Solutions 8B		
Page	Question or Section	Error
3	Chapter 8, 6(h)	The equation on the graph should be $y = -2x^2 + 4x + 11$
5	Chapter 8, 14	Question, The points $A(-3, -1)$, $B(3, 11)$, $C(0, m)$...
5	Chapter 8, 14(b)	Solution, Using points A and B, ... Method 1 5th line: $2n = -5$
8	Chapter 8, 23	The altitude y meters of a ...
8	Chapter 8, 23(b)	Solution, The equation on the graph should be: $y = t^2 - 7t + 11$ The y-axis should be labeled: Altitude (m)
9	Chapter 8, 25	Question, The profit (in thousands of dollars s) of a company ... where x (in thousands of dollars s) ...
10	Chapter 8, 26(a)	Solution, The equation on the graph should be: $V = -30t + 200$
10	Chapter 8, 27	Question, The equations s of two linear functions...

10	Chapter 9, 1	Question, The following table shows the quarterly revenues and expenditures of a company...
15	Chapter 9, 14(c)(ii)	Solution, mass of gold that is worth \$9,600 = 8 troy ounces
16	Chapter 9, 18	Question, The distance-time graph should be below the question.
16	Chapter 9, (a)(i)	From 09:00 hour to 09:11 hours.
18	Chapter 9, 21(a)(i)	Solution, Volume of water in container at depth of 12 cm
20	Chapter 9, 25	Question, The y-axis should be labeled: Distance from P (miles)
22	Chapter 9, (b)	Solution, 7th line: $P = \frac{80}{6} \times \frac{3}{5}$
27	Chapter 10, 14(b)(ii)	Solution, $\begin{aligned} WY^2 &= WX^2 - XY^2 \\ &= 13.5^2 - 12.5^2 \\ &= 26.0 \text{ (correct to 3 sig. fig.)} \\ WY &= \sqrt{26} \\ &= 5.10 \text{ cm (correct to 3 sig. fig.)} \end{aligned}$
27	Chapter 10, (c)	Solution, $\begin{aligned} \text{Area of } \triangle WXZ &= \frac{1}{2} \times 12.5 \times (30 + \sqrt{26}) \\ &= 219 \text{ cm}^2 \text{ (correct to 3 sig. fig.)} \end{aligned}$
30	Chapter 10, 23	Question, The figure is missing.
31	Chapter 10, 24(b)	Solution, 5th line: (1) x 2: 2p + 2q = 8(3)
32	Chapter 10, 25(b)	Apply the Pythagorean Theorem...
33	Chapter 10, 28	Question, In the figure, the three circles with centers at ... BC = 8 cm ...
33	Chapter 10, 28	Solution, Let x cm, y cm, and z cm be the radii of the circles with centers at...
42	Chapter 11, 22(c)	Solution, 2nd to last line: = 1.15233 x 0.25
44	Chapter 11, 28	Question, The figure shows an L-shaped region...
47	Chapter 12, 7(c)	Solution, Total surface area = $\pi \times 162 + \pi \times 16 \times 34$
47	Chapter 12, 8	Question, The base diameter of each cone is 14 cm ...
50	Chapter, 12 18(b)	Solution, 4th line: r = 15
55	Chapter 12, 34(b)	Solution, 2nd to last line: $= \sqrt[3]{\frac{3}{2}}$
56	Chapter 12, 35(a)	Solution, 12th line: $(\sqrt{2}y)^2 - \left(\frac{\sqrt{2}}{3}y\right)^2$
58	Chapter 13, 4	Question, The table on the left and the table on the right show the responses from the...
62	Chapter 13, 16(b)	Solution, Investments row, Total column: 23.25
63	Chapter 13, 18(b)	Solution, 2006 difference = 50 – 14 = 36
64	Chapter 13, 21(a)	Solution, In the graph, the point representing 2005 is incorrectly placed. It should be at 371.
65	Chapter 13, 22(c)	Question, Describe the correlation between the two variables.

65	Chapter 13, (b)	Solution, The point at (65, 1.65) is incorrectly placed. It should be at (54, 1.65). The point at (54, 1.72) is incorrectly placed. It should be at (64, 1.72).
65	Chapter 13, 23(b)(ii)	4th line: = 29%
67	Chapter 13, 27	Question, Vertical label on chart: Puzzle B (x minutes)
67	Chapter 13, (a)	Solution, Vertical label on chart:
68	Chapter 13, (b)	Solution, Graph for Puzzle B Frequency bar for 10-15 min should be to 13.
68	Chapter 13, 28(d)	Solution, So it is not possible to call when the user is away.
68	Chapter 13, 29	Question, ... the total weight of fruits produced from each tree was measured.
69	Chapter 13, 29(a)	Solution, The point at (60, 12.8) is incorrectly placed. It should be at (60, 13.1). The label on the y-axis should include the units (kg). The x axis should extend to 70. The corresponding masses for 70 cm ² are missing.
69	Chapter 13, 30(c)	Solution, The statement is true if the number of members is the same every year.
69	Chapter 13, 30(d)	Solution, Change member to members in 3 places.
70	Chapter 13, 31(c)	Solution, ...the scale of the vertical axis on Rick's...
70	Chapter 13, 32(c)	Solution, Thus the graph gives readers the impression that the revenue in Year 3 is 4.6 times that in Year 1.
70	Chapter 13, 33(a)	Solution, The chart is missing the point (0, 82).
71	Chapter 14, 2(d)	Solution, Last line: = -1.11 or 8.11 (correct to 3 sig. fig.)
72	Chapter 14, 2(g)	Solution, 2nd line: $x^2 + \frac{3}{4}x - \frac{3}{2} = 0$ 5th line: $\left(x + \frac{3}{8}\right)^2 = \frac{105}{64}$
76	Chapter 14, 11(f)	Solution, 5th and 6th line: $\left(x + \frac{7}{4}\right)^2 - \left(\frac{7}{4}\right)^2 = 3$ $\left(x + \frac{7}{4}\right)^2 = \frac{97}{16}$
76	Chapter 14, 11(g)	Solution, 5th and 6th line: $\left(x + \frac{23}{6}\right)^2 - \left(\frac{23}{6}\right)^2 = -\frac{25}{3}$ $\left(x + \frac{23}{6}\right)^2 = \frac{229}{36}$
79	Chapter 14, 15(b)	Solution, Last line: = -0.823 or 1.82 (correct to 3 sig. fig.)
80	Chapter 14, 17(b)(i)	Solution, Last line: = 12,942 cm ³ (correct to 3 sig. fig.)
81	Chapter 14, 19(a)(ii)	Solution, Area of unshaded region = area of EBCH + Area of GFH
82	Chapter 14, 23(c)	Solution, Second line: $= \frac{-16 \pm \sqrt{576}}{32}$
83	Chapter 14, 26(b)	Question, Leave your answer with square root signs.

Dimensions Math Teaching Notes Solutions 8B												
Page	Question or Section	Error										
3	10.3	Applications of <i>Pythagorean Theorem</i>										
6	13.3	Second to last paragraph, last sentence: ... on scatter plots and to analyze the correlation of ...										
6	13.3	Last paragraph, last line: ... a simple project on data collection, organization , presentation,										
20	Class Activity 5, (d)(i)	Answer, The graphs (ii), (ii) and (iv) have the same shape, and the lowest part of the curve passes through the y-axis. Graphs (ii) and (ii) both pass through (0, 0) at the lowest part of their curve, but have different widths.										
20	Class Activity 5, (d)(ii)	Graph (viii) (−1, 2)										
20	Class Activity 5, (d)(v)	Graphs (i), (ii), (iii), (v), (vi), and (vii) meet the x-axis at one point. Graphs (iv) and (viii) cross the x-axis at two points.										
20	Class Activity 5, (d)(vi)	Graph (viii); $x = 1$										
21	Class Activity 6, 6(b)	Answer: On graph, change (vi) to (iv).										
22	Class Activity 6, 6(c)(i)	Answer: Graphs (i) and (ii) pass through ...										
22	Class Activity 6, 6(c)(iv)	Answer: ... graph (iv) meets the axis at 2 points, and graph (iii) meets the axis at 0 points.										
25	Try It, 4(s)	Solution: The line of symmetry of the graph is $x = 3$. Therefore the minimum distance is 1 cm.										
25	Try It, 5	When David hits a soccer ball with his head, ...										
25	Try It, 5(b)	Solution: In the chart, replace x with t and y with h.										
27	Ex. 8.1, 4(a)	Solution: <table border="1"><tr><td>x</td><td>−3</td><td>−1</td><td>0</td><td>3</td></tr><tr><td>y</td><td>−7</td><td>−3</td><td>−1</td><td>5</td></tr></table>	x	−3	−1	0	3	y	−7	−3	−1	5
x	−3	−1	0	3								
y	−7	−3	−1	5								
27	Ex. 8.1, 5(a)(ii)	Solution: Since the total charge increases by \$50 for every car rented, the function is linear. Rate of change = \$50/car										
29	Ex. 8.1, 10(a)	Solution: The graph is incorrect. Only the first point on the graph, (0, 96) is placed correctly.										
33	Ex. 8.2, 4	Solution: The solution is labeled incorrectly, and should be (a), (b), (c), (d), (e) rather than (a), (b), (b), (c), (d).										
34	Ex. 8.2, 5(a)-(b)	Solution: The graphs should be unlabeled and the parts following it labeled (i), (ii), (iii) and (iv).										
34	Ex. 8.2, 5(c)(iv)	Solution: y-intercept = 6										
37	Rev. Ex. 8, 1	Solution: Delete part (d). Change (c) to (b). Move graph to be last and label it (c). For new (b): Slope = ...										
37	Rev. Ex. 8, 2(a)	Solution: The units on the graph are incorrect. The x-axis should be Distance (miles) and the y-axis should be Time (min).										
38	Rev. Ex. 8, 3(c)	Solution: Initial value = 13.5										
38	Rev. Ex. 8, 3(b)	Solution: The required function is $y = 0.035x + 13.5$										
40	Rev. Ex. 8, 8	Solution: The last three parts should be labeled (b) then (i), (ii), (iii), not (b), (c), (d).										
40	Rev. Ex. 8, 10(c)	Solution: It represents the cost of workmanship.										
43	Try It, 3(f)	Solution: From the graph, from 8:30 to 9:00, Jim traveled 20 km. Jim's speed = $20 \div \frac{30}{60}$										

46	Ex. 9.1, 3(a)	Solution: Price of Anne's order = \$3.49 + \$1.50 + \$0.89 + \$0.59
47	Ex. 9.1, 4(b)(ii)	Solution: Third line from bottom: $\frac{2,500}{17,000} \times 200\%$
49	Ex. 9.2, 2(b)	Solution: $= 13\frac{1}{3} \text{ km/h}$
50	Ex. 9.2, 4(b)	Solution: Average speed of Alicia for the whole journey
50	Ex. 9.2, 4(c)(ii)	Solution: The diagram below shows the distance-time graph of John and Alicia.
52	Ex. 9.2, 8	Solution: However, after driving for 15 minutes, he realized that ...
52	Ex. 9.2, 9(b)(i)	Solution: Peter's speed during the first 5 minutes $= \frac{0.75 \text{ km}}{5 \text{ min}}$ $= \frac{750 \text{ m}}{300 \text{ s}}$ $= 2.5 \text{ m/s}$
52	Ex. 9.2, 9(b)(ii)	Solution: Peter's speed during the last 4 minutes $= \frac{0.75 \text{ km}}{4 \text{ min}}$ $= \frac{750 \text{ m}}{240 \text{ s}}$ $= 3.125 \text{ m/s}$ $= 3.13 \text{ m/s (rounded to 3 sig. fig.)}$
53	Ex. 9.2, 10	Solution: However, after cycling 5 km he realized he had ...
53	Rev. Ex. 9, 2(a)	Solution: When $t = 2$, $y = (0.3 + (0.2 \times 2)) = 0.7$ When $t = 4$, $y = (0.3 + (0.2 \times 4)) = 1.1$ When $t = 6$, $y = (0.3 + (0.2 \times 6)) = 1.5$ When $t = 8$, $y = (1.5 + [0.1 \times (8 - 6)]) = 1.7$
55	Rev. Ex. 9, 6	Question: After the goods were delivered at the second destination, ...
56	Rev. Ex. 9, 6(b)	Solution: From t_2 to t_3 , distance the truck traveled $= 0.5 \text{ km/min} \times 20 \text{ min}$ $= 10 \text{ km}$ Total distance to second destination $= 15 \text{ km} + 10 \text{ km}$ $= 25 \text{ km}$
56	Rev. Ex. 9, 6(c)	Solution: Total time taken to unload goods = $90 - 45$ $= 45 \text{ min}$
66	Ex. 10.1, 11(a)	Solution: \therefore the four sides of PQRS are equal, and all of its angles are equal to 90° .

67	Ex. 10.2, 2(a)	Solution: $b^2 + c^2 = 9.9^2 + 2^2 = 102.01$ $a^2 = 10.1^2 = 102.01$ $\therefore a^2 = b^2 + c^2$ $\triangle ABC$ is a right-angled triangle.						
67	Ex. 10.2, 3	Solution: $AD^2 + DC^2 = 8^2 + 24^2$ $= 640$ Remove the Note at the end.						
77	Rev. Ex. 10, 8(c)	Solution: Area of $\triangle ABC = \frac{1}{2} \times$ Area of ABCD $\therefore \frac{1}{2} \times AC \times h = \frac{1}{2} \times 240$						
80	Class Activity 1, 1(a)	Answer: <table border="1"> <tr> <td>RS</td><td>R(-2, 1), S(-2, 3)</td><td>3 - 1 = 2</td></tr> <tr> <td>LM</td><td>L(3, -2), M(3, 1)</td><td>1 - (-2) = 3</td></tr> </table>	RS	R(-2, 1), S(-2, 3)	3 - 1 = 2	LM	L(3, -2), M(3, 1)	1 - (-2) = 3
RS	R(-2, 1), S(-2, 3)	3 - 1 = 2						
LM	L(3, -2), M(3, 1)	1 - (-2) = 3						
82	Class Activity 2, 1(c)	Answer: The lines AB, BC, and AC have the same slope.						
82	Class Activity 2, 2(b)	Answer: Second equation down on right hand side: $EC = 6 - 0 = 6$						
83	Class Activity 2, 2(d)	Answer: From (a), it is shown that the slopes of ... From (b), it is also shown that the ratios ...						
86	Try It, 3(c)	Solution: Slope of TV = $\frac{0-9}{-4-2}$						
87	Try It, 6(a)	Question: Change comma at end of sentence to a period.						
87	Try It, 6(b)	Solution: Let the equation of CD be $y = -7x + c$,						
87	Try It, 7(b)	Solution: Since it passed through ... the equation of RS is $y = 5$.						
91	Ex. 11.2, 1(h)	Solution: Slope of PQ = $\frac{3aq - 3ap}{aq^2 - ap^2}$ $= \frac{3a(q-p)}{a(q+p)(q-p)}$ $= \frac{3}{q+p}$						
92	Ex. 11.2, 8	Solution: $3t^2 - t - 10 = 0$ $(3t + 5)(t - 2) = 0$ $t = -\frac{5}{3}$ or $t = 2$						
93	Ex. 11.2, 10(a)	Solution: Slope of PQ = $\frac{0 - (-3)}{4 - (-2)}$						
93	Ex. 11.2, 10(b)	Solution: The products of the slopes of the adjacent sides ...						
94	Ex. 11.3, 1(d)	Solution: slope = 0						
96	Ex. 11.3, 6	Question: On the graph, the last label on the x-axis should be 4, not x.						
96	Ex. 11.3, 6	Solution: L5 is a vertical line that passes through (3, 0). The equation of L5 is $x = 3$.						

99	Rev. Ex. 11, 1(b)	<p>Solution:</p> $\therefore m = -\frac{3}{2}, \text{ and } y = -\frac{3}{2}x + c$ <p>...</p> $\therefore \text{The equation of the line is } y = -\frac{3}{2}x - 8$ <p>Since $(k, -5)$ lies on the line,</p> $-5 = -\frac{3}{2}k - 8$ $\frac{3}{2}k = -3$ $k = -2$
99	Rev. Ex. 11, 2(d)	Question: Omit. RT cannot be found from the length of PQ using information students have currently been taught.
99	Rev. Ex. 11, 2(c)	<p>Solution:</p> $QR = 6 + 6$ $= 12 \text{ units}$ $MP = 6 - (-3)$ $= 9 \text{ units}$ $\text{Area of } \triangle PQR = \frac{1}{2} \times 12 \times 9$ $= 54 \text{ units}^2$
100	Rev. Ex. 11, 2(d)	Solution: Omit. The solution does not make sense, and the length of PQ is not correctly calculated.
100	Rev. Ex. 11, 3(e)	Question: Find the coordinates of the point at which the line AC cuts the y-axis.
100	Rev. Ex. 11, 3(e)	<p>Solution: Let $(0, t)$ be the point that AC cuts the y-axis.</p> <p>Slope of AT = slope of AC</p> $\frac{t - 2}{0 - (-1)} = \frac{3 - 2}{4 - (-1)}$ $t - 2 = \frac{1}{5}$ $t = \frac{11}{5}$ <p>The required coordinates are $(0, \frac{11}{5})$</p>
102	Rev. Ex. 11, 6(b)	Solution: $\therefore \text{slope of } AC = \text{slope of } AG$
102	Rev. Ex. 11, 6(b)	Solution: $\therefore \text{slope of } BD = \text{slope of } BG$
102	Rev. Ex. 11, 7(d)	<p>Solution:</p> $AB^2 + BC^2 = (\sqrt{52})^2 + (\sqrt{20})^2$ $= 72$
103	Rev. Ex. 11, 9(a)	<p>Solution:</p> $\text{Slope of } BD = \frac{4 - 2}{(-5 - 9)}$ $= -\frac{1}{7}$ <p>Let the equation of the line be $y = -\frac{1}{7}x + c$</p> <p>Since $C(7, 8)$ lies on the line,</p> $8 = (-\frac{1}{7})(7) + c$ $c = 9$ <p>\therefore The equation of the line is $y = -\frac{1}{7}x + 9$.</p>
107	Ch12, (b)(i)	<p>Solution: For $n = 2$, the 5 centers of ...</p> <p>...</p> <p>Let N be the center of ABCD,</p>
107	Ch12, (b)	Solution: For $n = 3$, the vertical distance between 2 centers in ...

110	Try It, 8(b)	Solution: Second to last line: $= 362.88\pi$
117	Ex. 12.1, 12	Solution: Volume of the pyramid $= \frac{1}{3} \times 7562 \times 480.6$ $= 7.16 \times 10^7 \text{ ft}^3$ (rounded to 3 sig. fig.)
119	Ex. 12.2, 8(a)	Solution: $\pi \times 2^2 \times y = \pi \times 6^2 \times 5$
121	Ex. 12.2, 15(c)	Solution: $= \left[\left(2 \times \pi \times \frac{4}{5} \right) \times (2 \times 100) \right] + \dots$ (first term should be squared.)
122	Ex. 12.3, 3(b)	Solution: The height of the cone is given as 25 cm. Delete the first 4 lines of the solution. Then: Volume of the cone $= \frac{1}{3} \times \pi \times 7^2 \times 25$ $= 408.33\pi$ $= 1,280 \text{ cm}^3$ (rounded to 3 sig. fig.)
135	Ex. 12.3, 13(b)	Solution: Area of trapezoid $= \frac{1}{2} (26 + 12 + 26 + 12) \times 16$ $= 608 \text{ in.}^2$ (rounded to 3 sig. fig.) Area of $EFG = \frac{1}{2} \times \pi \times \left(\frac{20}{2} \right)^2$ $= 157 \text{ in.}^2$ (rounded to 3 sig. fig.) Length of $EFG = \frac{1}{2} \times 2 \times \pi \times \frac{20}{2}$ $= 31.4 \text{ in.}$ (rounded to 3 sig. fig.)
135	Ex. 12.3, 13(b)	Solution: Surface area $= 2(608 - 157) + [2(15) + (10\pi) + 2(20) + 26]$ $\times 5 \times 12$ $= 8,550 \text{ in.}^2$ (rounded to 3 sig. fig.)
135	Ex. 12.3, 13(c)	Solution: Volume of girder $= (608 - 157) \times 5 \times 12$ $= 27,100 \text{ in.}^3$ (rounded to 3 sig. fig.)
135	Ex. 12.3, 13(s)	Solution: Total weight $= 0.28 \times 27,100$ $= 7,590 \text{ pounds}$ (rounded to 3 sig. fig.)
135	Ex. 12.3, 14	Solution: Change the diagram; the diameters are 3 and 4, not the radii.
135	Ex. 12.3, 14(a)	Solution: Volume of material used $= (\pi \times 2^2 \times 1.2 \times 100) - (\pi \times 1.5^2 \times 1.2 \times 100)$ $= 660 \text{ cm}^3$ (rounded to 3 sig. fig.)
135	Ex. 12.3, 14(b)	Solution: Total surface area $= 2(\pi \times 2^2 - \pi \times 1.5^2) + 2 \times \pi \times 1.5 \times 1.2 \times 100$ $+ (2 \times \pi \times 2 \times 1.2 \times 100)$ $= 2,650 \text{ cm}^2$ (rounded to 3 sig. fig.)

135	Ex. 12.3, 14(c)	Solution: Volume of water $= \pi \times 1.52 \times 25 \times 1 \times 60$ $= 10,600 \text{ cm}^3$ (rounded to 3 sig. fig.)																					
135	Ex. 12.3, 14(d)	Solution: $48 \times 30 \times h = 10,600$ $h = 7.36 \text{ cm}$ (rounded to 3 sig. fig.)																					
136	Ex. 12.3, 15(b)	Solution: Total surface area $= 2(4 \times 7) + 2(\frac{1}{4} \times \pi \times 7^2)$ $+ 20 \times (7 + 4 + 7 + 4 + (\frac{1}{4} \times 2 \times \pi \times 7))$ $= 56 + \frac{49}{2} \pi + 440 + 70 \pi$ $= 793 \text{ cm}^2$ (rounded to 3 sig. fig.)																					
136	Ex. 12.3, 15(d)	Solution: Total lacquer required = 793×10 $= 7,930 \text{ cm}^2$... Bottles of lacquer required = 2																					
143	Try It, 1	Solution: <table><tr><th>Fitness Grade</th><th>Tally</th><th>Frequency</th></tr><tr><td>A</td><td>### ///</td><td>9</td></tr><tr><td>B</td><td>### ### /</td><td>11</td></tr><tr><td>C</td><td>### ###</td><td>10</td></tr><tr><td>D</td><td>////</td><td>4</td></tr><tr><td>F</td><td>//</td><td>2</td></tr><tr><td colspan="2">Total</td><td>36</td></tr></table>	Fitness Grade	Tally	Frequency	A	### ///	9	B	### ### /	11	C	### ###	10	D	////	4	F	//	2	Total		36
Fitness Grade	Tally	Frequency																					
A	### ///	9																					
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143	Try It, 3(a)	Solution: <table><tr><th>Students</th><th>6th Grade</th><th>8th Grade</th><th>Total</th></tr><tr><td>Action (A)</td><td>10</td><td>8</td><td>18</td></tr><tr><td>Comedy (C)</td><td>10</td><td>5</td><td>15</td></tr><tr><td>Romance (R)</td><td>5</td><td>12</td><td>17</td></tr><tr><td>Total</td><td>25</td><td>25</td><td>50</td></tr></table>	Students	6th Grade	8th Grade	Total	Action (A)	10	8	18	Comedy (C)	10	5	15	Romance (R)	5	12	17	Total	25	25	50	
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148	Ex. 13.1, 3(a)	Solution: <table><tr><th>Gender</th><th>Men</th><th>Women</th><th>Total</th></tr><tr><td>Approved of the proposal</td><td>21</td><td>98</td><td>119</td></tr><tr><td>Disapproved of the proposal</td><td>74</td><td>37</td><td>111</td></tr><tr><td>Total</td><td>95</td><td>135</td><td>230</td></tr></table> (i) Total number of people disapproved = 111	Gender	Men	Women	Total	Approved of the proposal	21	98	119	Disapproved of the proposal	74	37	111	Total	95	135	230					
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Approved of the proposal	21	98	119																				
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Total	95	135	230																				
149	Ex. 13.1, 5(c)	Question: Find the percentage of students who obtained grade A or grade B.																					
149	Ex. 13.1, 5(a)	Solution: In table, fitness grade, last row, change E to F.																					
150	Ex. 13.1, 8(c)	Solution: More female students like to attend Drama, Chess, and Literary Club, and more male students like to attend Math Club. Drama Club has the highest attendance among females.																					
151	Ex. 13.1, 9(d)	Solution: ... and watching TV is the most preferred weekend leisure activity for men.																					
152	Ex. 13.2, 1(c)	Question: Which snack foods were preferred ...																					
152	Ex. 13.2, 1(d)	Name the top three preferred snack foods among ...																					
153	Ex. 13.2, 3(a)(ii)	In the graph, replace E with F.																					
153	Ex. 13.2, 3(a)(ii)	In the chart, replace E with F.																					
157	Ex. 13.2, 10(c)	Solution: Chips were preferred by considerably more boys than girls.																					
159	Ex. 13.3, 2	... in one town from 2006 to 2014.																					
159	Ex. 13.3, 2(b)	Solution, The graph is drawn incorrectly. The solid line should go to (2014, 7.3) and then a dotted line should extend from that to (2014, 7.8).																					

159	Ex. 13.3, 3(b)	Solution: The price of the stock decreases in general, ...
160	Ex. 13.3, 5(a)	Solution: The estimated slope is $-\frac{1}{15}$.
160	Ex. 13.3, 5(d)	Solution: There is a high negative correlation between the number of hours the students spent on online activities and their academic performance. The fewer the number of hours the students spent on online activities, the higher are their grade point averages.
161	Ex. 13.3, 7(a)	Solution: The line graph is missing.
161	Ex. 13.3, 7(b)	Solution: This is mislabeled as (a).
161	Ex. 13.3, 7(b)(i)	Solution: = 1.77% (rounded to 3 sig. fig.)
161	Ex. 13.3, 7(b)(ii)	Solution: $= \frac{4.24 - 4.19}{4.19} \times 100\%$
163	Ex. 13.3, 10(a)	Solution: The data points for 2009 and 2010 are incorrect. They should be at (2009, 9.3) and (2010, 9.7). The line from 2011 to 2012 should be dotted, since it is estimated.
163	Ex. 13.3, 10(b)	Solution: Between 2007 and 2010 , There is a sharp increase of 4.7% to 2009, and a further increase of 0.4%, bringing unemployment rate to its highest in 6 years.
164	Ex. 13.3, 12(c)	Solution: Solution shown is for (c)(i).
164	Ex. 13.3, 12(c)(ii)	Solution: $y = \frac{1}{12}x + 2$
165		Review Exercise 13
165	Rev. Ex. 13, 1(b)	Solution: Basketball and soccer are equally popular among the students.
166	Rev. Ex. 13, 2(b)	Solution: The choir club was the most popular.
166	Rev. Ex. 13, 2(d)	Solution: Total number of girls = $4 + 13 + 10 + 12 = 39$
166	Rev. Ex. 13, 3(d)	Solution: The growth in height is greatest from age 11 to 14, and then slows down in the next four years. There is no increase in height from age 16 to 17.
166	Rev. Ex. 13, 3(c)	Solution: The girl's height at age 18 is estimated to be 169 cm.
166	Rev. Ex. 13, 3(d)(i)	Solution: $m = 60 + 0.9(h - 160)$ When $h = 168$, $m = 60 + 0.9(168 - 160)$ $= 67.2$
166	Rev. Ex. 13, 3(d)(ii)	Solution: $\text{When } m = 63,$ $63 = 60 + 0.9(h - 160)$ $3 = 0.9(h - 160)$ $h - 160 = 3 \frac{1}{3}$ $h = 163 \frac{1}{3}$
167	Rev. Ex. 13, 5	Question: ... and US Dollars (USD) ...
168	Rev. Ex. 13, 6(a)	Solution: On the graph, Day 1 should have a temperature of 85°, not 80°.
168	Rev. Ex. 13, 7(a)	Solution: y-axis label: Number of Beach Visitors x-axis label: Temperature (°F)
169	Rev. Ex. 13, 8(a)(i)	Soluton: In the graph, there should be a point at (6, 80). There should not be points at (6, 100) and (6, 200).
170-171	Class Activity 14	The figures do not need to be shown twice.
173	Try It, 1	Solution: $x = -\frac{2}{5} \quad \text{or} \quad x = 3$

174	Try It, 7	Solution: $2x^2 - 9x + 6 = 0$ $x^2 - \frac{9}{2} = -3$ $x^2 - \frac{9}{2}x + \left(-\frac{9}{2}\right)^2 = -3 + \left(-\frac{9}{2}\right)^2$ $\left(x - \frac{9}{4}\right)^2 = \frac{33}{16}$ $x - \frac{9}{4} = -\sqrt{\frac{33}{16}} \quad \text{or} \quad x - \frac{9}{4} = \sqrt{\frac{33}{16}}$ $x = -\sqrt{\frac{33}{16}} + \frac{9}{4} \quad \text{or} \quad x = \sqrt{\frac{33}{16}} + \frac{9}{4}$ $x = 0.814 \quad \text{or} \quad x = 3.69$
177	Ex. 14.1, 1(b)	Solution: $x^2 + 13x - 30 = 0$ $(x+15)(x-2) = 0$ $x+15=0 \quad \text{or} \quad x-2=0$ $x=-15 \quad \text{or} \quad x=2$
177	Ex. 14.1, 1(c)	Solution: Last line: $x = -\frac{1}{2} \quad \text{or} \quad x = 7$
177	Ex. 14.1, 1(d)	Solution: Third line: $3x - 4 = 0 \quad \text{or} \quad x - 2 = 0$
179	Ex. 14.2, 1(d)	Solution: $x^2 + 7x + \left(\frac{7}{2}\right)^2 = \left(x + \frac{7}{2}\right)^2$
179	Ex. 14.2, 2(a)	Solution: Third line: $x + 3 = -7 \quad \text{or} \quad x + 3 = 7$
179	Ex. 14.2, 2(b)	Solution: Third line: $x - \frac{5}{2} = -\frac{3}{2} \quad \text{or} \quad x - \frac{5}{2} = \frac{3}{2}$
179	Ex. 14.2, 3(b)	Solution: Third line: $x^2 - 14x + \left(-\frac{14}{2}\right)^2 = 5 + \left(-\frac{14}{2}\right)^2$ Sixth line: $x + 7 = -\sqrt{54} \quad \text{or} \quad x - 7 = -\sqrt{54}$
180	Ex. 14.2, 4(b)	Solution: Third line: $x^2 - x + \left(-\frac{1}{2}\right)^2 = 1 + \left(-\frac{1}{2}\right)^2$
180	Ex. 14.2, 4(d)	Solution: Fourth line: $x^2 - \frac{14}{3}x + \left(-\frac{14}{6}\right)^2 = -2 + \left(-\frac{14}{6}\right)^2$
181	Ex. 14.2, 5(a)	Solution: Sixth line: $x + \frac{13}{2} = \pm \sqrt{\frac{205}{4}}$
181	Ex. 14.2, 5(d)	Solution: First line: $2x(x-5) = 7(x+1)$
182	Ex. 14.3, 2(c)	Solution: Second line: $11 - (4x^2 - 12 + 9) = 0$
184	Ex. 14.3, 5	Question: Its vertical distance, h meters, from the ground ...
186	Ex. 14.4, 6(a)	Solution: Second row, first column of table: $y = 3x^2 - 2x + 4$
188	Ex. 14.5, 2	Solution: Fifth line: $(x-17)(x+19) = 0$

188	Ex. 14.5, 4	Solution: Replace the word “breadth” with “ ”.
191	Ex. 14.5, 15(c)	Solution: Second line: $x = \frac{-2 \pm \sqrt{2^2 - 4(4)(-25)}}{2(4)}$ Last line: $= 2.26 \text{ or } -2.76$
191	Ex. 14.5, 15(d)	Solution: When $x = 2.26$, time taken by tap A = $\frac{50}{2.26}$ $= 22.1 \text{ min}$
192	Rev. Ex. 14, 4(b)	Solution: $36x^2 + 12x - 1 = 0$ $x = \frac{-12 \pm \sqrt{12^2 - 4(36)(-1)}}{2(36)}$ $x = \frac{-12 \pm \sqrt{288}}{2(36)}$ $x = \frac{-12 + \sqrt{288}}{2(36)} \text{ or } x = \frac{-12 - \sqrt{288}}{2(36)}$ $x = 0.0690 \text{ or } x = -0.402$ (rounded to 3 sig. fig.)
193	Rev. Ex. 14, 5(a)	Solution: Third line: $x + 1 = \pm \sqrt{36}$
193	Rev. Ex. 14, 6(d)	Solution: Third line: $\frac{15x - 1}{9x^2 - 1} = -\frac{1}{3x}$
194	Rev. Ex. 14, 8	Solution: $= 55.2$ or (rejected) \therefore the train's average speed is 55.2 mph.
194	Rev. Ex. 14, 10(a)(iii)	Solution: $(24 \times 17) + 12 = 420$
194	Rev. Ex. 14, 10(b)	Solution: $(24 - x)(17 + x) = 420$ $408 + 24x - 17x - x^2 = 420$ $-x^2 + 7x + 12 = 0$ $(x - 4)(x - 3) = 0$ $x = 4 \text{ or } x = 3$
195	Rev. Ex. 14, 11	Solution: Put (b) farther down, in front of the line Perimeter of rectangle A.
195	Rev. Ex. 14, 11(a)	Solution: Use the current material under (a) and then the material under (b) up to the line that says “Perimeter of rectangle A” with the following corrections, starting with the last correct line of solution: $3x^2 + 6x - 32 = 0$ $x = \frac{-6 \pm \sqrt{(-6)^2 - 4(3)(-32)}}{2(3)}$ $= \frac{-6 \pm \sqrt{36 + 384}}{6}$ $= \frac{-6 + \sqrt{420}}{6} \text{ or } \frac{-6 - \sqrt{420}}{6}$ $= 2.42 \text{ or } -4.42 \text{ (rejected)}$ (rounded to 3 sig. fig.) $\text{Width of rectangle B} = \frac{16}{2.42 + 2} = 3.62 \text{ m}$

195	Rev. Ex. 14, 11(b)	<p>Solution: Perimeter of rectangle A</p> $= 2 \left(x + \frac{16}{x} \right)$ $= 2 \left(2.42 + \frac{16}{2.24} \right)$ $= 18.1 \quad (\text{rounded to 3 sig. fig.})$ <p>Perimeter of rectangle B</p> $= 2 \left[\left(x + 2 \right) + \frac{16}{x + 2} \right]$ $= 2 \left[\left(2.42 + 2 \right) + \frac{16}{2.42 + 2} \right]$ $= 16.1 \quad (\text{rounded to 3 sig. fig.})$ <p>\therefore Garden plot A has the greater perimeter.</p>
195	Rev. Ex. 14, 12(a)(ii)	Solution: Second line: $2x^2 + 7x - 1,400 = 0$
195	Rev. Ex. 14, 12(c)	Solution: When $x = -30.19$, the number of gallons used when ...

